Yes

Consult the General Studies Request FAQ for more information and quick answers.

New permanent numbered courses must be submitted to the workflow in Kuali CM before a General Studies request is submitted here. The General Studies Council will not review requests ahead of a new course proposal being reviewed by the Senate.

Submission Information	1		
College/School		Department/School	
Watts College of Public Service & Community Solutions (CPP)		School of Community Resources and Development (CCOMRES)	
Submission Type			
New Request			
Requested Effective Dat	e		
Fall 2024			
ASU Request			
Is this request for a peri	nanent course or a topic	c?	
Permanent Course			
Subject Code	Course Numb	er Units/Credit Hours	
CRD	402	3	
Course Information Enter the course catalo Course Title	og information, found in	the web course catalog or Kuali CM.	
Assessment & Evaluati	on of Community Servic	es	
Course Catalog Descri			
Introduces applied leis collection techniques,		asis on program evaluation, research design, data	
Enrollment Requireme	nts (Prerequisites, Cored	quisites, and/or Antirequisites)	
·	um 45 hours; Credit is al DR Visiting University Stu	lowed for only CRD 402 or CSM 402 or NLM 402 or ident	
Is this a crosslisted cou	ırse?	List all crosslisted courses by subject code and number.	

	CSM 402, PRM 402, TDM 402, NLM 402			
Is this course offered by (shared with) another academic unit?				
No				
Shared Departments/Schools				
School of Community Resources and Development (CCOMRES)				
Statement of Support #1	Statement of Support #2	Statement of Support #3		
No Response	No Response	No Response		

If this course or topic already carries a General Studies Gold designation, please check this box.

General Studies Gold Designation Request

Requested Designation

Quantitative Reasoning (QTRS)

Attach a representative syllabus for the course, including course learning outcomes and descriptions of assignments and assessments.

402 syllabus SPRING 24.docx

Quantitative Reasoning (QTRS)

Quantitative and computational reasoning is essential for success in 21st-century careers, for critically evaluating information in the age of "big data," for assessing the quality of arguments conveyed through digital media, for informed participation in community and social life, and for contributing to the formulation of effective solutions for achieving a sustainable and just future. Quantitative reasoning enables students to apply relevant mathematical, statistical, computational, and visualization methods in academic, social and personal settings.

In a quantitative reasoning course, students learn about data, data management, data summaries, data visualization, and the use of computational tools with data. Data can take many forms, including numerical data, textual data, images, and others. Students also learn about how quantitative reasoning can be used to make arguments clear, precise and verifiable. Finally, they learn to build quantitative models, make predictions, and communicate their findings based on available data. This may include some combination of mathematical, statistical, computational or network models, or visualizations.

<u>Instructions:</u> In the fields below, state the assignment, project, or assessment that will measure each learning outcome, and provide a description. The description should provide enough detail to show how it measures the learning outcome. If needed, more than one can be identified.

The proposal does not need to include all course assessments that measure a given learning outcome. The provided assessment should include sufficient detail to allow the subcommittee to

make their evaluation. When appropriate, the same assessment can be listed for more than one learning outcome (e.g., a culminating project).

You may provide links to a document (Google Drive or Dropbox) that includes the relevant details for the assessment. **Do not provide links to Canvas shells.**

QTRS Learning Outcome 1: Understand variables, measurement and data, including how they can be used to pose and answer questions about society and nature, and to manipulate, organize, classify and visualize quantitative data.

Application 1- Questionnaire. In this assignment students identify a research question of interest to them, identify the variables in the question, determine at what level of measurement they will measure each variable, and then create a questionnaire that measures the variables at those measurement levels. Application 4 - Quantitative Analysis - in this assignment, students are given a spreadsheet of data from a survey, and must conduct a series of analyses using the data, and answer relevant questions about the data, including interpreting the data and using the data to make recommendations to an organization.

QTRS Learning Outcome 2: Evaluate arguments from everyday life or academic fields of study that are represented mathematically, statistically, computationally, or in visualizations.

Application 5- Interpreting Data and Making Recommendations - in this assignment students are provided with a set of results, which is presented in a combination of tables and visualizations, are asked to interpret the data, and provide management recommendations to an organization based on the data. Application 6- Interpreting Related Research - in this assignment, students must find relevant academic articles, demonstrate a basic understanding of the article, and answer questions related to the limitations of their results (including the ability to make causal statements) and the specific applicability of the results.

QTRS Learning Outcome 3: Formulate hypotheses, mathematical models or narratives that are consistent with quantitative data.

Final Project - in this assignment, students design a survey, collect primary data using the survey, analyze the data (quantitative), and use the data to provide specific conclusions and management recommendations. The format of the paper mirrors that of a traditional research paper (IMRaD), with a specific empahsis on using the data to make practical, informed management recommendations to an organization.

QTRS Learning Outcome 4: Communicate how quantitative data, interpretations, or models are connected to outcomes, predictions, decisions, explanations, or future states.

Final Project - in this assignment, students design a survey, collect primary data using the survey, analyze the data (quantitative), and use the data to provide specific conclusions and management recommendations. The format of the paper mirrors that of a traditional research paper (IMRaD), with a specific emphasis on using the data to make practical, informed management recommendations to an organization. Application 5- Interpreting Data and Making Recommendations - in this assignment students are provided with a set of results, which is presented in a combination of tables

and visualizations, are asked to interpret the data, and provide management recommendations to an organization based on the data.

QTRS Learning Outcome 5: Employ one or more digital tools effectively to accomplish these outcomes.

In the final project, and application 4 (both described above), students must use survey software (Qualtrics or Google Forms), and Excel to conduct quantitative analysis and relevant visuals. Students are also encouraged (but not required) to use Canvaa to create infographics to communicate the results through infographics.

List all course-specific learning outcomes. Where appropriate, identify the associated QTRS learning outcome(s) in brackets (see below for example). Note: It is expected that a majority of course-specific learning outcomes will be associated with a QTRS learning outcome.

- 1. Identify purposes and procedures for assessing programs and services, and the role of research and evaluation in decision making at the organization and destination level
- 2. Locate relevant and appropriate information to assist in evaluating a program or service (QTRS LO 2)
- 3. Compare evaluation methods and match methods to specific evaluation purposes
- 4. Apply the goal-attainment model to determine the effectiveness of a program or service (QTRS LO 3)
- 5. Formulate questionnaires and interviews to collect evaluation data (QTRS LO 1)
- 6. Analyze primary data using both quantitative and qualitative techniques (QTRS LO 1,3,5)
- 7. Interpret evaluation data and provide recommendations to programs and services (QTRS LO 1,2,3)
- 8. Synthesize primary and secondary data in a professional report (QTRS LO 1, 2, 3, 4,5)

Form Submission - Proposer

Submitted for Approval | Proposer

Olya Sharifi - April 11, 2024 at 10:19 AM (America/Phoenix)

Department Approval

Approved

Olya Sharifi - April 11, 2024 at 10:20 AM (America/Phoenix)

This course isn't shared with any other unit but form would not continue without a selection so I chose our own school CCOMRES

Chris Hiryak

Christine Buzinde

GSC Coordinator Review

Sent Back

Kaitlyn Dorson - April 11, 2024 at 11:04 AM (America/Phoenix)

The appropriate GS Gold statement is required to be included in the syllabus that is attached in this proposal. Please edit the syllabus to include the appropriate GS Gold statement which can be found linked in the GS Gold Designation Request field in the following phrase: "The syllabus must include all requirements of ACD 304-10 and the appropriate General Studies Gold statement found here. Syllabi with missing components will not be accepted."

April Randall

Form Submission - Proposer

Submitted for Approval | Proposer

Olya Sharifi - April 11, 2024 at 11:23 AM (America/Phoenix)

Department Approval

Approved

Olya Sharifi - April 11, 2024 at 11:23 AM (America/Phoenix)

Chris Hiryak

Christine Buzinde

GSC Coordinator Review

Kaitlyn Dorson - April 11, 2024 at 12:11 PM (America/Phoenix)

April Randall

Assistant Vice Provost Review

Approved

Tamiko Azuma - April 11, 2024 at 1:03 PM (America/Phoenix)

Pre-GSC Meeting

Approved

Kaitlyn Dorson - April 11, 2024 at 1:08 PM (America/Phoenix)

April Randall

Quantitative Reasoning (QTRS) Subcommittee

Acknowledgement Requested

Pierre Herckes

Terri Kurz - April 22, 2024 at 11:10 AM (America/Phoenix)

Revise and Resubmit: While the course has some quantitative reasoning activities, there does not seem to be a deep enough focus on quantitative reasoning to warrant a Gold QTRS designation. Most of the assignment descriptions focus on a superficial analysis and presentation modes. The activity and other activities described do not seem to rise to the level of quantitative reasoning experiences for students. There needs to be a clearer alignment to learning outcomes.

Michelle Mancenido

Elizabeth Kizer

General Studies Council Meeting

Waiting for Approval

Kaitlyn Dorson

April Randall

Registrar Notification

Notification

Courses Implementation

Implementation Approval
Αρριοναι
Rebecca Klein
Lauren Bates
Alisha Von Kampen
Proposer Notification
Notification
Olya Sharifi
College Notification
Notification
Judy Krysik
Margaretha Bentley
Cody Telep
Olya Sharifi
Chris Hiryak
William Terrill
ATCS Notification - ASU Course
Notification
Bryan Tinlin
Jessica Burns
Michele Devine
DARS Notification
Notification
Leticia Mayer
Peggy Boivin